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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,298	09/29/2003	Arthur J. Colvig	TUC920030087US1	4106

49080 7590 02/06/2007
DALE F. REGELMAN
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TUCSON, AZ 85714

EXAMINER

PRAKASAM, RAMYA G

ART UNIT	PAPER NUMBER
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3651

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.	Applicant(s)	
10/674,298	COLVIG ET AL.	
Examiner	Art Unit	
Ramya G. Prakasam	3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 11/16/2006 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Claim Rejections - 35 USC § 103

3. Claims 1, 3-4, 6, 8-9, 11, 13, 15-16, 18, 20-21, 23, 25, 27-28, 30, 32-33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plutt (U.S. Patent No. 6,591,164) in view of Dimitri (U.S. Patent Application Publication No. 2002/0062167)

Plutt discloses a method to provide selectable redundant accessor availability in a data storage and retrieval system, comprising the steps of:

- Providing a data storage and retrieval system (100) comprising one or more data storage devices (103) and an accessor (121-126), wherein said accessor comprises a first gripper and a second gripper (102, See Figure 1);
- Operating said first gripper (See Column 3, lines 32-35);
- Requesting use of said second gripper (See Column 4, lines 9-14);
- Determining if use of said second gripper is authorized (See Column 4, lines 40-45);
- If use of said second gripper is authorized, operating said second gripper (See Column 4, lines 43-45).

Plutt further discloses a method to provide selectable redundant accessor availability in a data storage and retrieval system, comprising the steps of:

- Providing a data storage and retrieval system (100) comprising one or more data storage devices(103), a first accessor (102), and a second accessor (See Figure 1);

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- Operating said first accessor but not said second accessor (See Column 4, lines 9-14);
- Requesting use of said second accessor (See Column 4, lines 40-67);
- Determining if use of said second accessor is authorized (See Column 4, lines 40-45);
- If use of said second accessor is authorized, operating said second accessor (See Column 4, lines 43-45).
- Wherein said data storage and retrieval system further comprises at least one of software and firmware to operate said first accessor and said second accessor (See Column 4, lines 25-27).
- Wherein said requesting step comprises requesting use of said second accessor for cold-standby availability (See Column 4, lines 43-45), and wherein said determining step comprises determining if use of said second accessor is authorized for cold-standby availability (See Column 4, lines 9-14), and wherein said operating step comprises operating said second accessor for cold-standby availability if use of said second accessor is authorized for cold-standby accessor availability (See Column 4, lines 43-45).
- Wherein said requesting step comprises requesting use of said second accessor for hot-standby availability (See Column 4, lines 43-45), and wherein said determining step comprises determining if use of said second accessor is authorized for hot-standby availability (See Column 4, lines 9-14), and wherein said operating step comprises operating said second accessor for hot-standby availability if use of said second accessor is authorized for hot-standby availability (See Column 4, lines 43-45).

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- Monitoring the operation of said first accessor (See Column 3, lines 32-35);
- If a failure of said first accessor is detected, operating said second accessor (See Column 4, lines 63-65).
- Wherein said requesting step comprises requesting use of said second accessor for dual-active accessor availability (See Column 4, lines 9-14), and wherein said determining step comprises determining if use of said second accessor is authorized for dual-active accessor availability (See Column 4, lines 40-67), and wherein said operating step comprises operating said second accessor and said first accessor simultaneously if use of said second accessor is authorized for dual-active accessor availability (See Column 4, lines 55-67).

Plutt also discloses an article of manufacture comprising one or more data storage devices (100) and an accessor (121-126) comprising

- a first gripper (200, Column 3, lines 30-40) and
- a second gripper (401, Column 3, line 66), and a computer useable medium having computer readable program code disposed therein to provide selectable redundant accessor availability (See Column 4, lines 40-67), the computer readable program code comprising a series of computer readable program steps to effect:
 - Operating said first gripper (See Column 3, lines 32-35);
 - Receiving a request to use said second gripper (See Column 4, lines 9-14);
 - Determining if use of said second gripper is authorized (See Column 4, lines 40-45);

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- If use of said second gripper is authorized, operating said second gripper (See Column 4, lines 43-45).

Plutt further discloses an article of manufacture comprising:

- one or more data storage devices (100)
- a first accessor (200, Column 3, lines 30-40),
- a second accessor (401, Column 3, line 66), and
- a computer useable medium having computer readable program code disposed therein to provide selectable redundant accessor availability, the computer readable program code (See Column 4, lines 40-67) comprising a series of computer readable program steps to effect:
 - Operating said first accessor but not said second accessor (See Column 3, lines 32-35);
 - Receiving a request to use said second accessor (See Column 4, lines 9-14);
 - Determining if use of said second accessor is authorized (See Column 4, lines 40-45);
 - If use of said second accessor is authorized, operating said second accessor (See Column 4, lines 43-45).
- At least one of software and firmware to operate said first accessor and said second accessor (See Column 4, lines 25-27).
- A series of computer readable program steps to receive a request for cold-standby availability for said second accessor (See Column 4, lines 43-45), and wherein said computer readable program code to determine if use of said second accessor is

authorized comprises a series of computer readable program steps to determine if use of said second accessor is authorized for cold-standby availability (See Column 4, lines 9-14), and wherein said computer readable program code to operate said second accessor comprises a series of computer readable program steps to operate said second accessor for cold-standby availability if use of said second accessor is authorized for cold-standby availability (See Column 4, lines 43-45).

- Wherein said computer readable program code to receive a request to use said second accessor comprises a series of computer readable program steps to receive a request for hot-standby availability for said second accessor (See Column 4, lines 43-45), and wherein said computer readable program code to determine if use of said second accessor is authorized comprises a series of computer readable a series of computer readable program steps to determine if use of said second accessor is authorized for hot-standby availability (See Column 4, lines 9-14), and wherein said computer readable program code to operate said second accessor comprises a series of computer readable program steps to operate said second accessor for hot-standby availability if use of said second accessor is authorized for hot-standby availability (See Column 4, lines 43-45).
- A series of computer readable program steps to effect:
 - Monitoring the operation of said first accessor (See Column 3, lines 32-35);
 - If a failure of said first accessor is detected, operating said second accessor (See Column 4, lines 63-65).

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- Wherein said computer readable program code to receive a request to use said second accessor comprises a series of computer readable program steps to receive a request for dual-active accessor availability (See Column 4, lines 9-14), and wherein said computer readable program code to determine if use of said second accessor is authorized comprises a series of computer readable program steps to determine if dual-active accessor availability is authorized (See Column 4, lines 40-67), and wherein said computer readable program code to operate said second accessor comprises a series of computer readable program steps to simultaneously operate said first accessor and said second accessor if dual-active accessor availability is authorized (See Column 4, lines 55-67).

Plutt further discloses a computer program product (See Column 4, lines 24-26) usable with a programmable computer processor having computer readable program code embodied therein to provide selectable redundant accessor availability in a data storage and retrieval system comprising one or more data storage devices (100) and an accessor (121-126), wherein said accessor comprises a first gripper (201) and a second gripper, comprises (400):

- Computer readable program code which causes said programmable computer processor to operate said first gripper (See Column 3, lines 32-35);
- Computer readable program code which causes said programmable computer processor to receive a request to use said second gripper (See Column 4, lines 9-14);
- Computer readable program code which causes said programmable computer processor to determine if use of said second gripper is authorized (See Column 4, lines 40-45);

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- Computer readable program code which, if use of said second gripper is authorized, causes said programmable computer processor to operate said second gripper (See Column 4, lines 43-45).

Plutt also discloses a computer program product (See Column 4, lines 24-26) usable with a usable with a programmable computer processor having computer readable program code embodied therein to provide selectable redundant accessor availability in a data storage and retrieval system comprising one or more data storage devices (100), a first accessor (201), and a second accessor (400), comprising:

- Computer readable program code which causes said programmable computer processor to operate said first accessor but not said second accessor (See Column 3, lines 32-35);
- Computer readable program code which causes said programmable computer processor to receive a request to use said second accessor (See Column 4, lines 9-14);
- Computer readable program code which causes said programmable computer processor to determine if use of said second accessor is authorized (See Column 4, lines 40-45);
- Computer readable program code which, if use of said second accessor is authorized, cause said programmable computer processor to operate said second accessor (See Column 4, lines 43-45).
- Wherein said data storage and retrieval system further comprises at least one of software and firmware to operate said first accessor and said second accessor (See Column 4, lines 25-27).

- Wherein said computer readable program code to receive a request to use said second accessor comprises computer readable program code which causes said programmable computer processor to receive a request for cold-standby availability for said second accessor (See Column 4, lines 43-45), and wherein said computer readable program code to determine if use of said second accessor is authorized comprises computer readable program code which causes said programmable computer processor to determine if cold-standby availability for said second accessor is authorized (See Column 4, lines 9-14), and wherein said computer readable program code to operate said second accessor comprises computer readable program code which, if cold-standby availability for said second accessor is authorized, causes said programmable computer processor to operate said second accessor for cold-standby availability (See Column 4, lines 43-45).
- Wherein said computer readable program code to receive a request to use said second accessor comprises computer readable program code which causes said programmable computer processor to receive a request for hot-standby availability for said second accessor (See Column 4, lines 43-45), and wherein said computer readable program code to determine if use of said second accessor is authorized comprises computer readable program code which causes said programmable computer processor to determine if hot-standby availability for said second accessor is authorized (See Column 4, lines 9-14), and wherein said computer readable program code to operate said second accessor comprises computer readable program code which, if hot-standby availability for said second accessor is authorized, causes

said programmable computer processor to operate said second accessor for hot-standby availability (See Column 4, lines 43-45).

- Computer readable program code which, if hot-standby availability for said second accessor is authorized, causes said programmable computer processor to monitor the operation of said first accessor (See Column 3, lines 32-35).
- Computer readable program code which, if a failure of said first accessor is detected, causes said programmable computer processor to operate said second accessor (See Column 4, lines 63-65).
- Wherein said computer readable program code to receive a request to use said second accessor comprises computer readable program code which causes said programmable computer processor to receive a request for dual-active accessor availability (See Column 4, lines 9-14), and wherein said computer readable program code to determine if use of said second accessor is authorized comprises computer readable program code which causes said programmable computer processor to determine if dual-active accessor availability is authorized (See Column 4, lines 40-67), and wherein said computer readable program code to operate said second accessor comprises computer readable program code which, if dual-active accessor availability is authorized, causes said programmable computer processor to simultaneously operate said first accessor and second accessor (See Column 4, lines 55-67).

Plutt, however, fails to explicitly disclose the use of an accessor with a lifting servo section, such that the first and second gripper are on the lifting servo section. Dimitri discloses

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the use of an accessor (15 and 16) with a lifting servo section (See Paragraph 42), such that the grippers (25) are on the lifting servo section (See Paragraph 42) for the purpose of moving the gripper vertically to access the cartridges (See Paragraph 42). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Plutt by utilizing an accessor with a lifting servo section, such that the grippers are on the lifting servo section for the purpose of moving the gripper vertically to access the cartridges.

4. Claims 2, 5, 7, 10, 12, 14, 17, 19, 22, 24, 26, 29, 31, 34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plutt in view of Dimitri and further in view of Grobler (U.S. Patent No. 6,799,084).

Plutt discloses all claimed limitations, except for the use of a software key in order to authorize the use of the second gripper or second accessor. Grobler discloses the use of a software key (See Column 3, lines 3-4) for the purpose of activating and deactivating the data storage and retrieval system from receiving data and/or releasing data (See Column 3, lines 4-7). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Plutt by utilizing a method, apparatus, and computer program product wherein a software key is used for the purpose of activating and deactivation the data storage and retrieval system from receiving data and/or releasing data.

Response to Arguments

5. Applicant's arguments with respect to claims 1-36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramya G. Prakasam whose telephone number is (571) 272-6011. The examiner can normally be reached on Monday - Thursday, 8:30am-7pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

2/4/2007
RGP


GENE C. CRAWFORD
SUPERVISORY PATENT EXAMINER